

Mobile telephone systems may involve separate home and serving TSPs. This situation is shown in Figure 18.

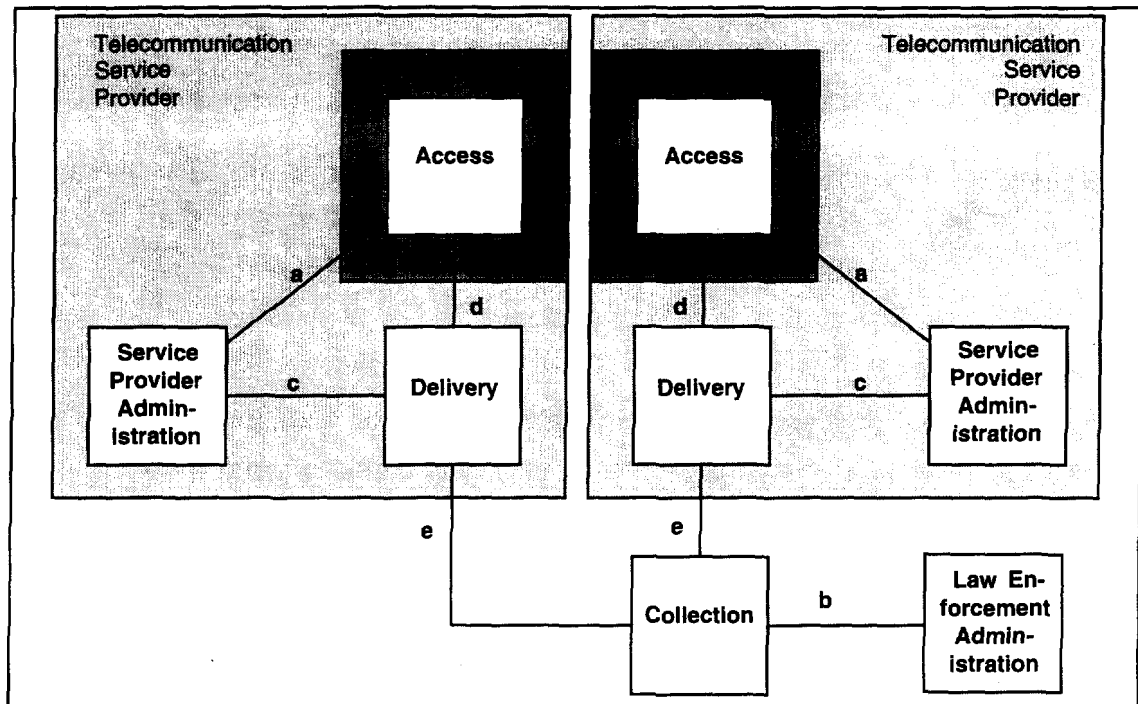


Figure 18: Mobile Telephone Systems with Two TSPs

Mobile telephony may elect to use pivoted delivery when a single TSP controls the Home and Serving Systems, where the CDCs and CCCs are centralized in a Delivery Function before interfacing the Collection Function. This allows a single point to control the information delivered to the Collection Function.

Figure 19 shows pivoted delivery where two totally independent systems are used. (Note: Φ_{bis} is an e-interface protocol used between two delivery boxes.)

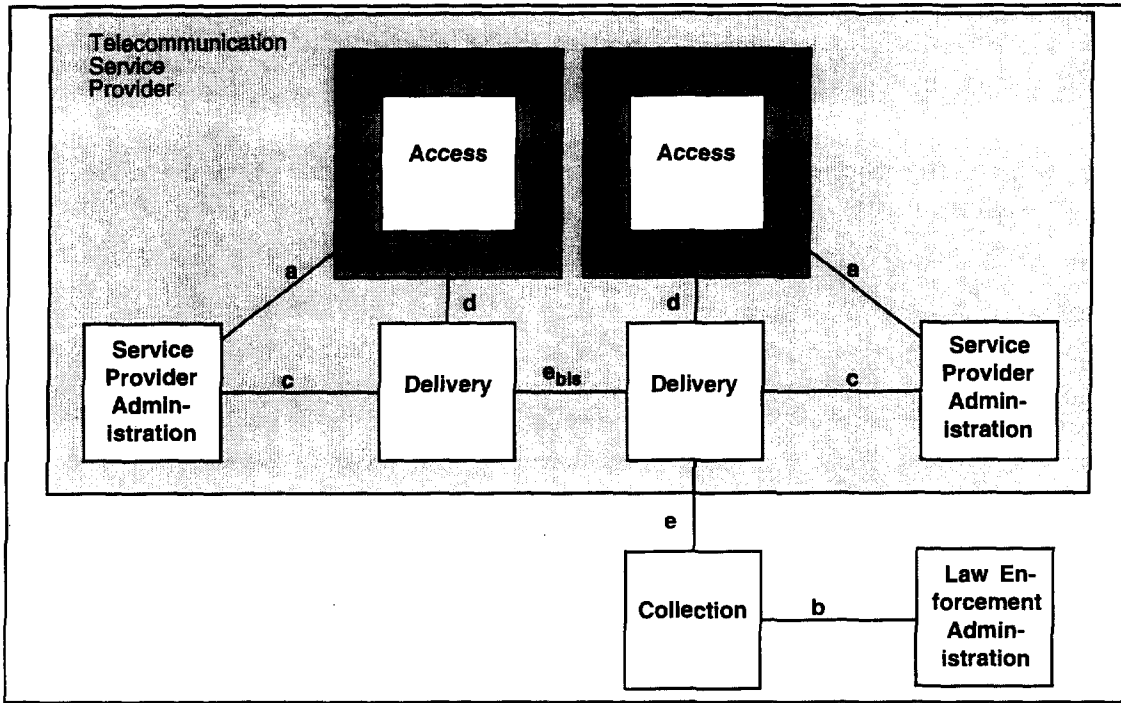


Figure 19: Independently Administered External Pivoted Delivery

A.3 Implementation of the d-interface

The CDC must support all of the IAPs within the interfaced Access Functions. This means that if something is required for a particular Access Function, it must be provided on the corresponding d-interface. For example, if an Access Function supports a Call-Identifying Information IAP (IDIAP) for an HLR, only the incoming calls and originating calls known to the HLR need to be reported. Even though the IDIAP allows for the reporting of all user signaling, the HLR IDIAP need only report the signaling to which it has access.

Any given Delivery Function need only provide one CCC delivery method. The delivery method chosen depends upon local economic, policy, and technical factors. For example, using dedicated circuits is appropriate to installations already having them and for smaller systems in future installations. A trunk group offers some efficiencies which may reduce costs on larger systems. A static directory number, although it may have questionable complexity, may technically provide the interface.

The Delivery Function should not generate call-identifying data and call content on its own, so there is little difference in the call associated and non-call associated messages from the IAPs. All of the call content must come across the d-interface. The Delivery Function may resolve interface differ-

ences between d- and e-interfaces, so it may need to handle different CCC delivery methods.

If the d-interface for the CCC is within the premises of a TSP, the need for transmission devices and intervening networks may be eliminated and simpler non-error handling protocols may be appropriate.

Accesses may be either bridged or looped. In a bridged access, the communication is accessed directly (e.g., in a time slot interchanger or with a bridging circuit) within the Access Function. Separate circuits are brought out for the transmit and receive paths of the accessed communication, as shown in Figure 20.

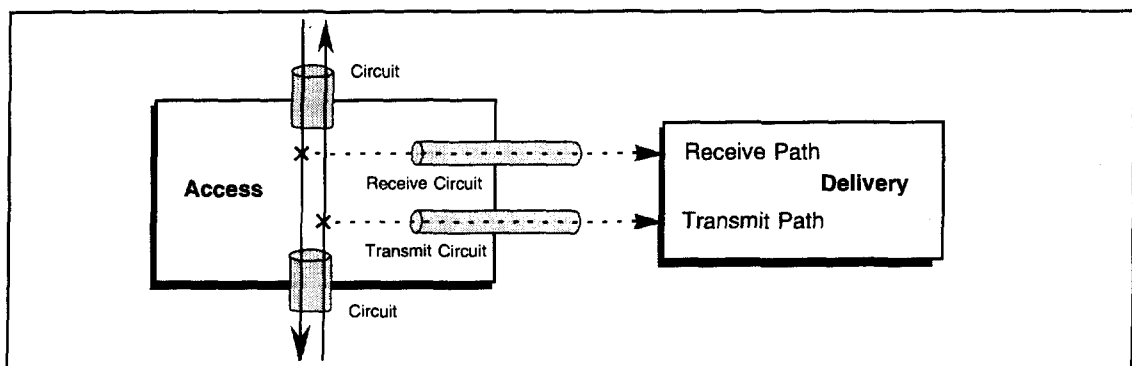


Figure 20: Bridged Access

In looped access the accessed communication is switched out of the Access Function as a circuit, looped through the Delivery Function and back into the Access Function, as shown in Figure 21. The Delivery Function is responsible for accessing the communication from the looped circuit and not disrupting the looped communication.

The bridged and looped access methods are considered to be logically equivalent, even though they have different physical implementations. They both access the intercept subject's transmit and receive communication paths.

If a subscriber's communications are combined, then combined delivery from the Access Function is sufficient. Even though some communications (e.g., speech and 3.1 kHz audio) are fully separated, combined delivery may still be appropriate since the communications must work even when communicating with an interface that supports only combined delivery. Even though combined delivery is sufficient, separated delivery is technically possible, but may not be economically viable.

Separated delivery on the d-interface allows the combining to take place in the Delivery Function. Combined delivery may be provided on the d-interface if all communications accessed by the IAP are by nature combined. There is some middle ground for the decision to be made on a per call basis using the negotiated bearer capability. The Combining can take place on either the Access or Delivery Function, provided that the communications that require separated delivery are not combined.

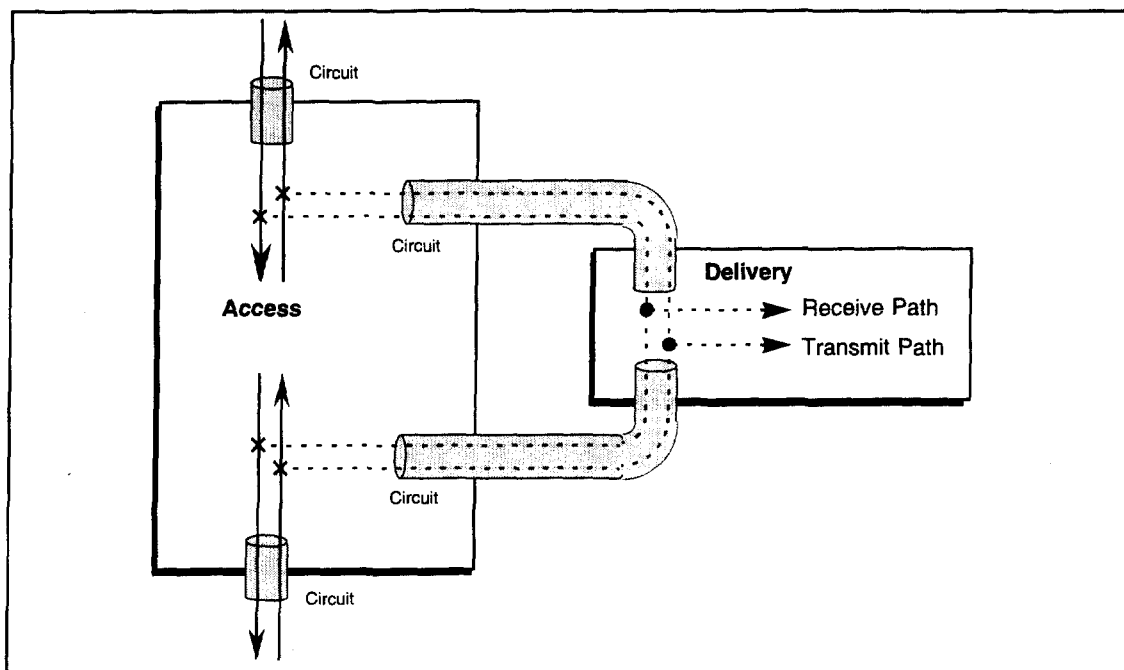


Figure 21: Looped Access

The bottom line for the choices is that they are subject to implementation decisions based on economic and TSP policy. It is likely that large systems may have different implementations than small systems.

A.4 Implementation of the e-interface

Any given Delivery Function need only provide one CCC delivery method. The delivery method chosen depends upon local economic, policy, and technical factors. For example, using dedicated circuits is appropriate to installations already having them and for smaller systems in future installations. Static directory numbers allows for some savings in the number of trunks required on the Delivery Function and Collection Function. Trunk groups may offer some savings for some installations.

When the e-interface is implemented between the Delivery Function and the Collection Function, there may be a number of different protocols used in the interface. This is because there may be intervening networks and specialized transmission devices (e.g., modems, DSUs, CSUs). The intervening network allows the LEA to procure its communication services from a TSP other than the TSP providing the Access Function. Transmission devices allow carriage of information which may not otherwise be possible (e.g., using a modem to carry data over an analog facility).

Figure 22 shows a few possibilities of the use of different transmission schemes on the e-interface. In general, the interface protocol provided by a Delivery Function (at the Φ -interface) need not be the same as the interface at the Collection Function (at the Φ -interface). The interface protocol stack for each interface is chosen at the agreement of the two ends of the transmission line. Only when there is a direct physical connection between the Delivery Function and the Collection Function must the interface protocols be the same.

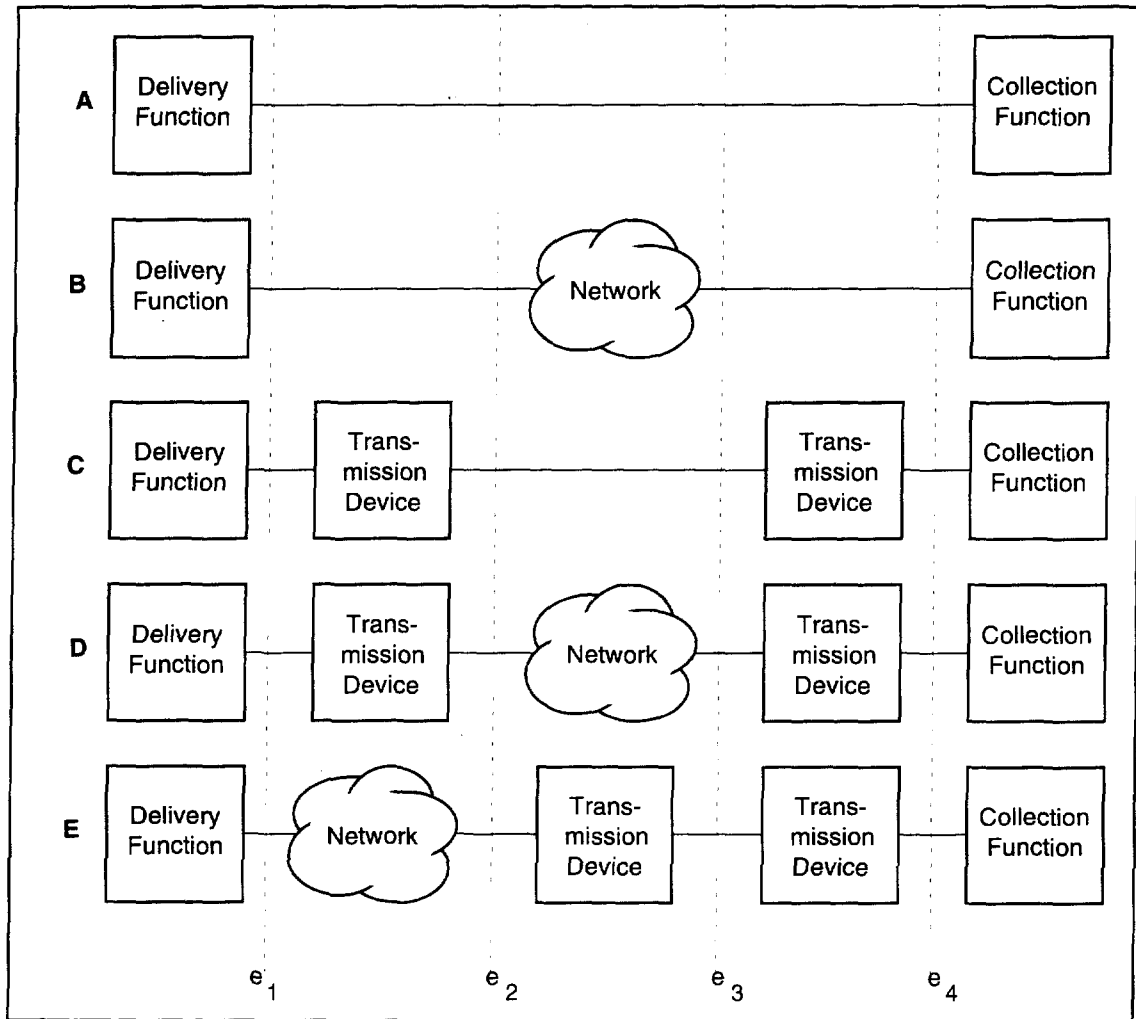


Figure 22: Possible Transmission Schemes for the e-Interface

A.5 Possible CDC Protocol Stacks

Figure 23 illustrates possible CDC Protocol Stacks. These are not meant to be definitive or exhaustive, but rather illustrative.

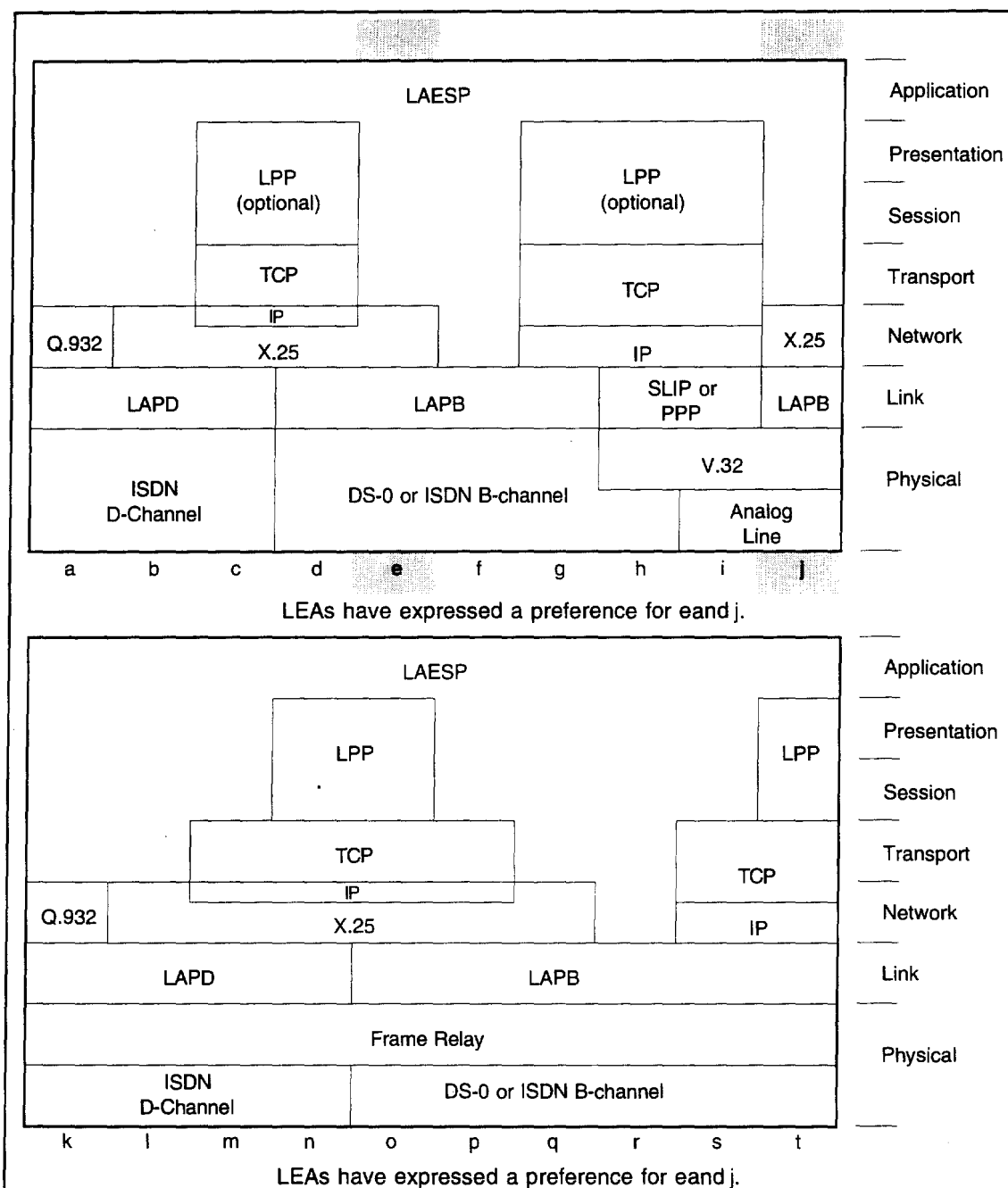


Figure 23: Possible CDC Protocol Stacks

(Sheet 1 of 2)

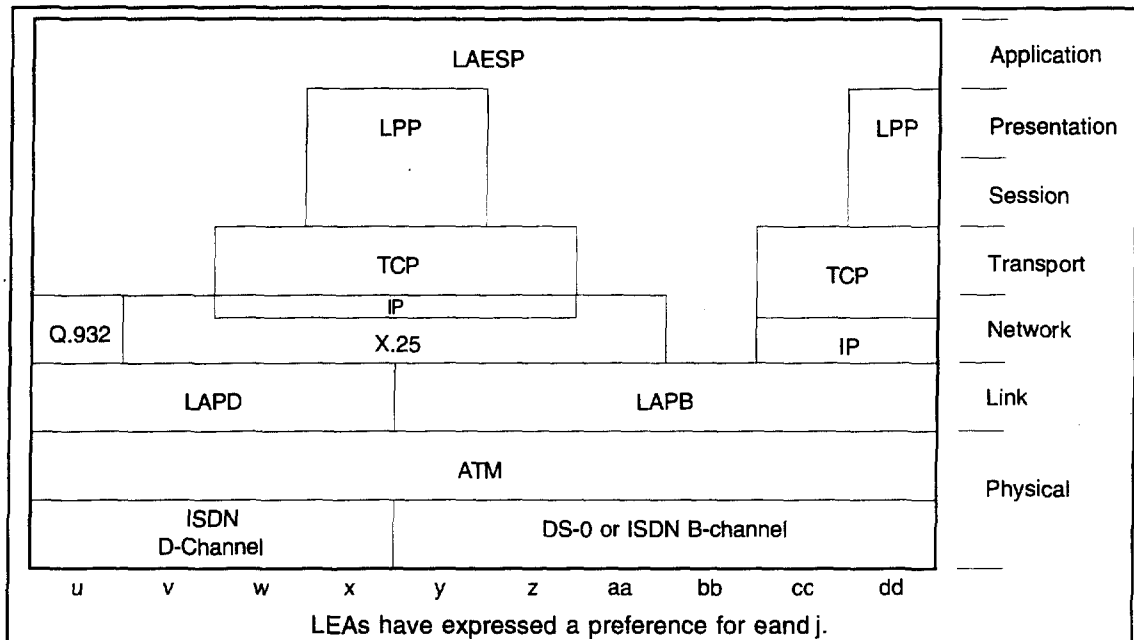


Figure 23: Possible CDC Protocol Stacks

(Sheet 2 of 2)

Dedicated data circuits should be used when delivery delay is of utmost importance.

Dedicated data links should be used where communication resources may be combined for a single destination.

Packet switched links should be used where communication services may be combined and packet switching services are available.

A.6 Possible CCC Protocol Stacks

Figure 24 illustrates possible CCC Protocol Stacks. This is not meant to be definitive or exhaustive, but rather illustrative.

Dedicated circuits are used when no call content delivery delay can be tolerated and in traditional intercept arrangements. Dedicated circuits may require a long lead time to establish a connection. Additional subscribers may not be added to a dedicated circuit, although dedicated circuits may be provisioned before they are needed.

Trunk groups may be used when some call content delivery delay can be tolerated and there is a high volume of call content deliveries between two points. A trunk group with excess capacity may be used by a new intercept subject without additional provisioning. Circuits may be added to a trunk group as necessary. Each intercept subject may be assigned a minimum number to reserve an intercept capacity for the intercept subject (The sum of the minimums should not exceed the capacity of the trunk group.) Each intercept subject may also be assigned a maximum to limit the number of circuits that an intercept subject may use. (This requires the trunk group to

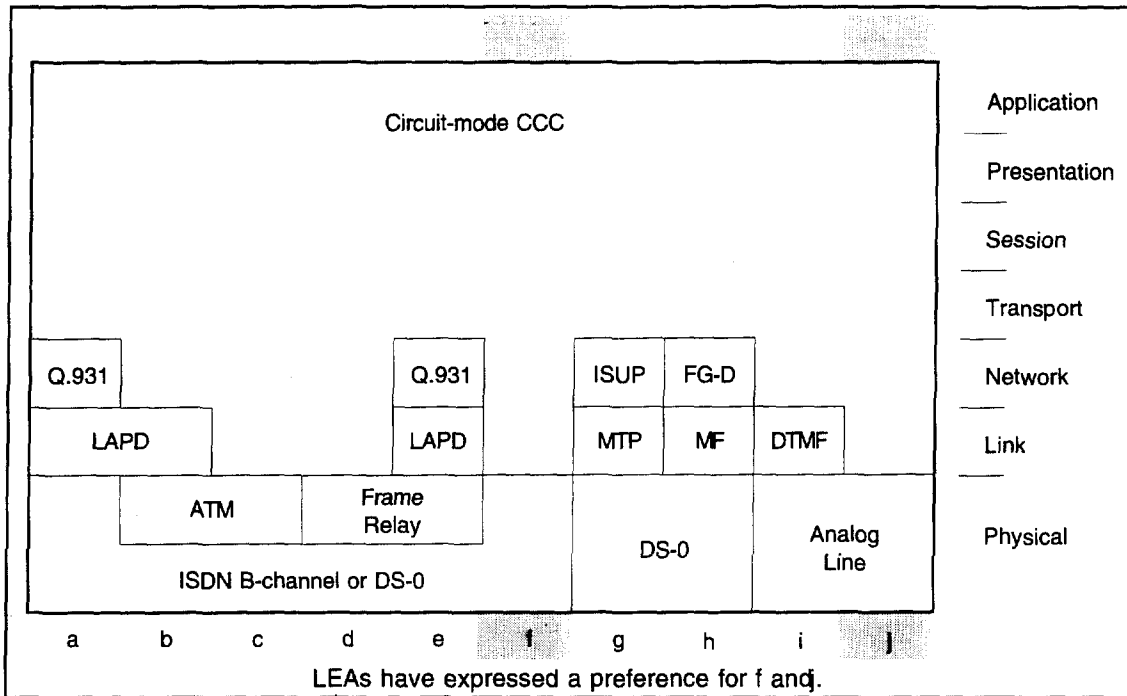


Figure 24: Possible Circuit-Mode CCC Protocol Stacks

have some excess capacity.) This engineering is the same on both sides of the trunk group.

Static directory numbers may be used when some call content delivery delay can be tolerated and a high flexibility for provisioning intercepts is desired. Static directory numbers on the source side use a common trunk group. Adding a trunk to a source is independent of adding a trunk to a destination. Trunks may be added at will. Intercept may also be added provided there is enough excess capacity. Each intercept subject may be assigned a minimum number to reserve an intercept capacity for the intercept subject on the source side. This same number should be reserved on the destination side. (The sum of the minimums should not exceed the capacity of the trunk group.) Each intercept subject is assigned a maximum number of circuits. The number of circuits on the destination side must at least be equal to the sum of the minimums, and the maximum should allow for whatever excess capacity is desired to prevent blocking. The engineering is different on source and destination sides. Blocking may occur on other side.

Packet-mode content may be delivered over the CDC (for a small number of packet types), over any of the CDC types. Other packet-mode content must be delivered using CCCs, possibly over a packet data network, as shown Figure 25. Dedicated facilities or subnetworks may be used between the PDIAP and the LEA to provide appropriate levels of security and throughput.

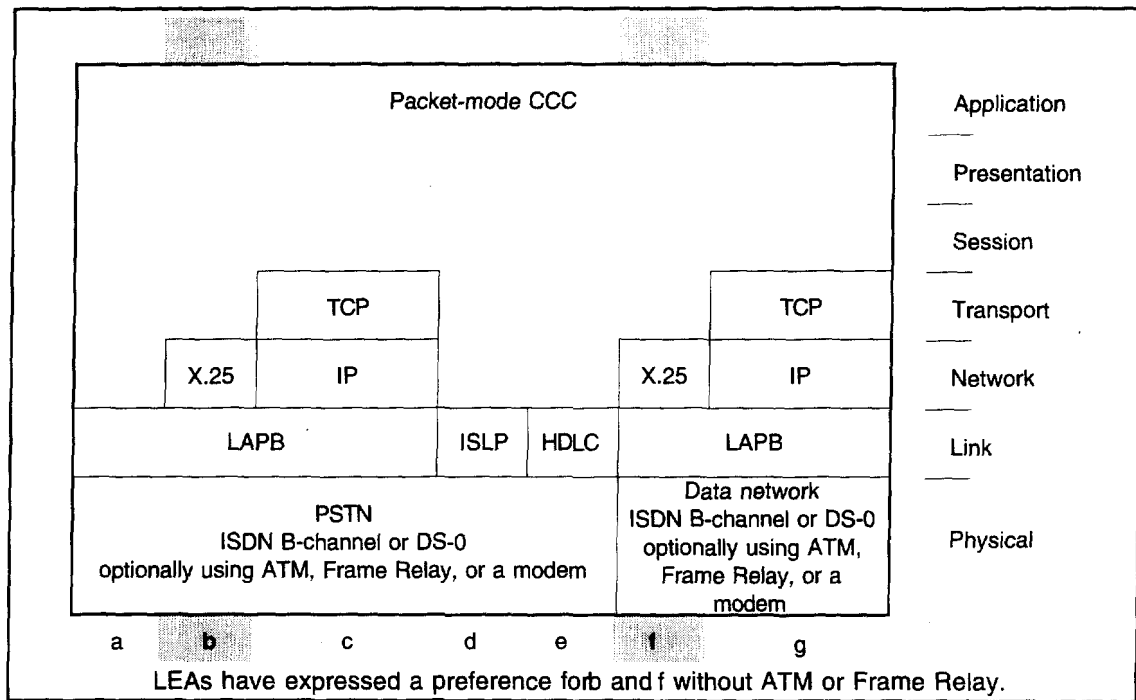


Figure 25: Possible Packet-Mode CCC Protocol Stacks

Annex B CCC Delivery Methods

This Annex is informative and is not considered part of this Standard.

B.1 Overview

This annex describes the CCC delivery services as a set of mechanisms and characteristics and options that may be considered when selecting a CCC delivery method:

- a. A CCC delivery method defining the overall signaling protocol.
 - Dedicated Circuit (see B.2),
 - Trunk Group (see B.3),
 - Static Directory Number (see B.4), or
 - Packet Data (see B.5).

The Access Function and the Collection Function shall support at least one delivery method. More than one technique may be supported for implementation richness or for failure backup and for handling of overloads of individual intercepts.

- b. Bearer service for the call content itself (e.g., analog or digital) (see B.6).
- c. Delivering an intercepted communication as separated channels (see B.7) or as a combined channels (see B.8).
- d. Delivery signaling for the CCC (see B.9).
~~Delivery signaling for the intercepted call's switchhook status (see B.10).~~
- e. The amount of acceptable end-to-end delay for the particular intercept (see B.10).
- f. Distributing the CCC to more than one Collection Function, each with its own delivery method and options (see B.11).

Intervening functional entities may convert the basic bearer service or the signaling method and may add additional delay.

Call content is delivered between the Access Function (or its IAPs) and the Delivery Function and between the Delivery Function and the Collection Function. The interface for both transfers is sufficiently similar to warrant only a single description. Within this section call content is described generically as being transferred from *source* to a *destination*.

The delivery of intercepted call content information has several phases. These phases are as follows:

- a. Obtain a network address of destination. Select the destination for the call content as either a destination directory number or a specific directly connected trunk.
- b. Setup the CCC to destination. Establish a channel to the destination to be used for the delivery of call content.

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- c. Destination acceptance or refusal of a CCC. The destination is given the option, in some cases, to accept or refuse the CCC.
- d. CCC continuity verification. Verify that the CCC has reached the destination and that it is capable of reliably transferring call content information.
- e. Associate intercept subject and call identity to the CCC. Establish the association of the CCC with the intercept subject, an intercepted call, and an IAP. Recording of the call content by the destination should begin at this point.
- f. Call content transfer. Transfer the intercepted call content. This phase lasts as long as necessary. Information identifying the call content is sent separately.
- g. Early CCC release by the destination. Some delivery methods allow the destination to release the delivery CCC.
- h. Disassociate CCC. Free up the association of the CCC to a particular call and intercept subject to allow it to be used for other purposes.
- i. Normal CCC release by the source.

The information flows described in this section are written for a single CCC. These procedures must be repeated for each CCC used (e.g., for separated delivery).

B.2 Dedicated Circuit CCC Delivery

Dedicated circuit delivery uses one or more circuits to convey the call content for a single intercept subject as shown in Figure 26. Each circuit is dedicated, so that circuit cannot be used for any other purpose. The circuit may be switched through the intervening network(s), but this switching is transparent to the usage of the circuit as the switching occurs when the circuit is provisioned. The intercept subject and the call content are identified with their association to a particular dedicated circuit.

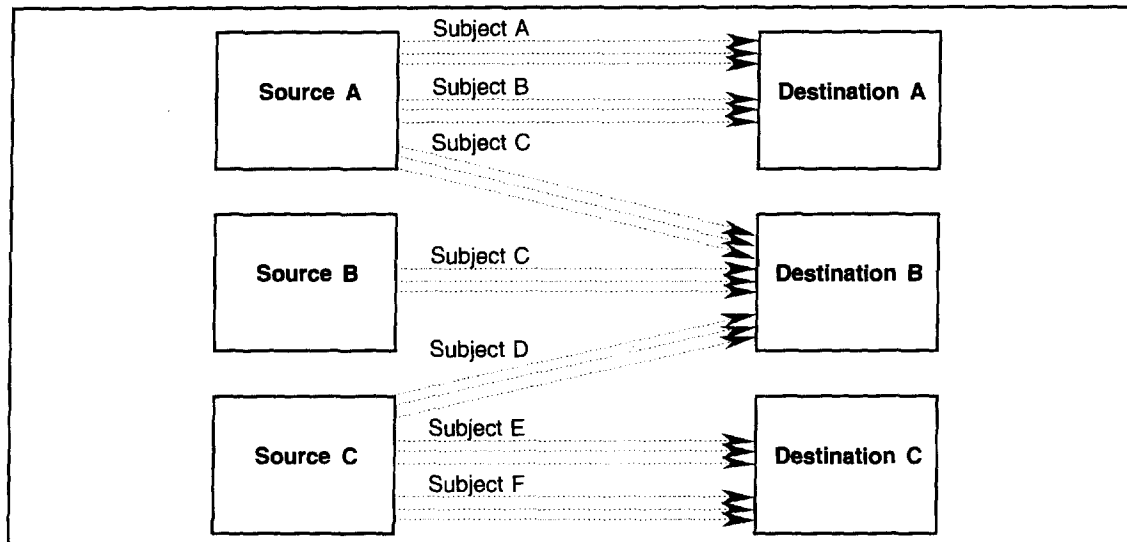


Figure 26: Dedicated Circuit CCC Delivery

Dedicated circuits are established circuits between two functions using dedicated equipment on both the source and destination. These circuits may be switched through an intervening network, although call setup procedures do not apply. Dedicated circuits are used in cases where no delivery delay is tolerable.

Dedicated circuits used for CCCs are assumed to have the following characteristics:

- DC signaling is not available end-to-end as intervening switches may ignore and not pass along DC signaling. (DC signaling may be used for direct connections.)
- DTMF C-tone may be used to convey DC signaling (i.e., off-hook, on-hook, decadic digits).
- A particular dedicated circuit has only one intercept subject assigned to it.
- An intercept subject may have one or more circuits available for delivering its call content.
- Separate dedicated circuits are required for each intercept subject and destination pair. (A Delivery Function may be used to spread a dedicated connection to more than one Collection Function.)
- The number of dedicated circuits to each Collection Function need not be equal.

B.2.1 Obtain Network Address of Destination

Select an idle circuit from the circuits available for this intercept subject and the selected destination. The selection criteria should use all circuits on a regular basis.

B.2.2 Setup CCC to Destination

No call setup is necessary.

Seize the selected dedicated circuit as shown in Figure 27.

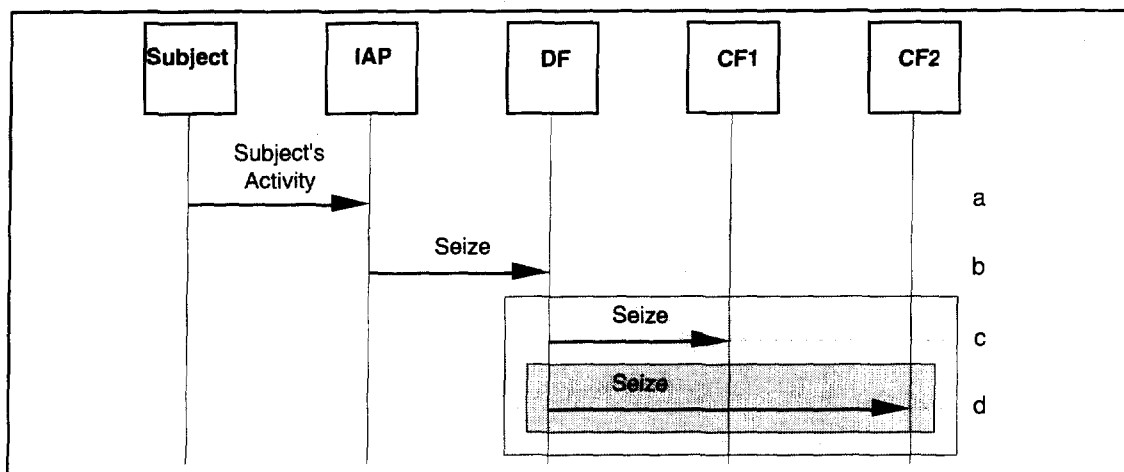


Figure 27: Setup CCC Using Dedicated Circuits

- The IAP is enabled and it detects that the intercept subject is communicating (e.g., an origination or termination attempt).
- The dedicated circuit is seized to the Delivery Function. This may be indicated with a DC signaling off-hook (when directly connected), by dropping DTMF C-tone, or with a CCOpen message.
- If applicable, the Delivery Function forwards the seizure indication to the dedicated circuit associated with the intercept subject to the Collection Function. The seizure may be indicated with a DC signaling off-hook (when directly connected), by dropping DTMF C-tone, or with a CCOpen message.
- Optionally, the Delivery Function may seize dedicated circuits associated with the intercept subject to one or more additional authorized Collection Function.

B.2.3 Destination Acceptance or Refusal of a CCC

There is no mechanism defined for a destination to accept or refuse a dedicated circuit CCC.

B.2.4 CCC Continuity Verification

While dedicated circuits are idle, DTMF C-tone may be applied to them. The presence of DTMF C-tone may be used to indicate circuit continuity, although it does not verify the source of the circuit or its association with any intercept subject.

B.2.5 Associate Intercept Subject and Call Identity to the CCC

The intercept subject is associated with a dedicated circuit for the life of the intercept order, so all that is required is to select the particular dedicated circuit or trunk as shown in Figure 28. The CCOpen message may be used to associate a particular call with the dedicated circuit. The CCOpen is particularly required when multiple dedicated circuits for a given intercept subject are used.

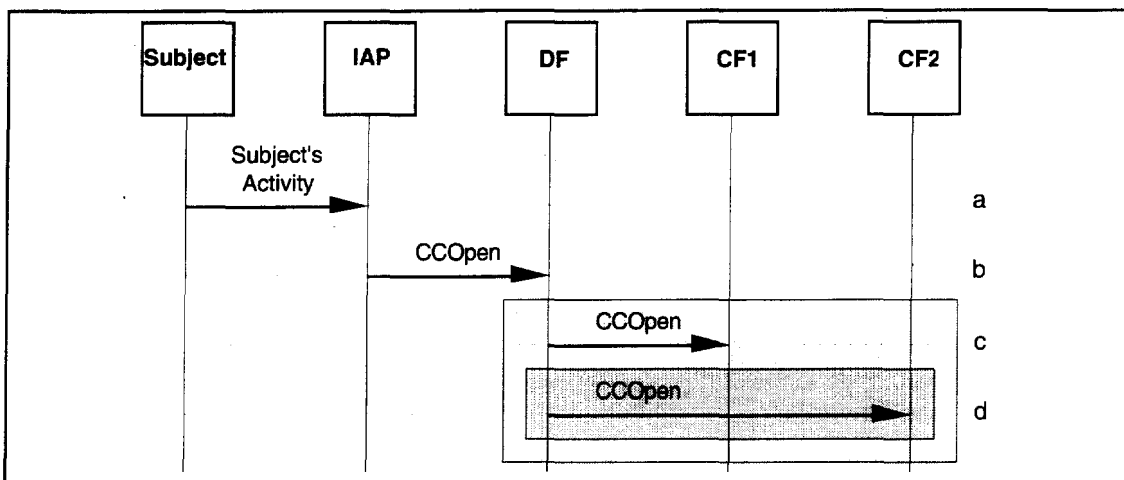


Figure 28: Associate CCC Using Dedicated Circuits

B.2.6 Call Content Transfer

The TSP duplicates the intercepted call content and delivers it to the selected Collection Functions over the CCCs identified in the CCOpen message associated with the intercepted communications as shown in Figure 29.

- The IAP is enabled and it detects that the intercept subject is communicating (e.g., an origination or termination attempt).
- The intercept subject's communications are intercepted and duplicated, and sent to the Delivery Function.
- If authorized, the Delivery Function passes the call content on to the Collection Function.
- Optionally, the Delivery Function may duplicate the call content and deliver it to one or more additional authorized Collection Functions.

B.2.7 Early CCC Release by the Destination

Dedicated circuits may not be released early by the destination.

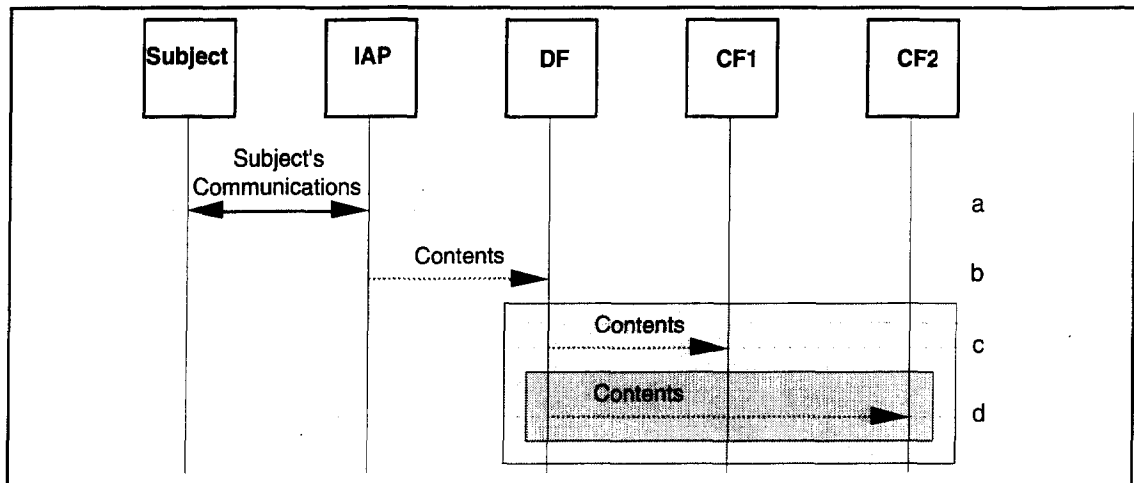


Figure 29: Transfer Call Content Using Dedicated Circuits

B.2.8 Disassociate CCC

The intercept subject is associated with a dedicated circuit for the life of the intercept, however the association for a particular call or intercept may be released with a CCClose message as shown in Figure 30.

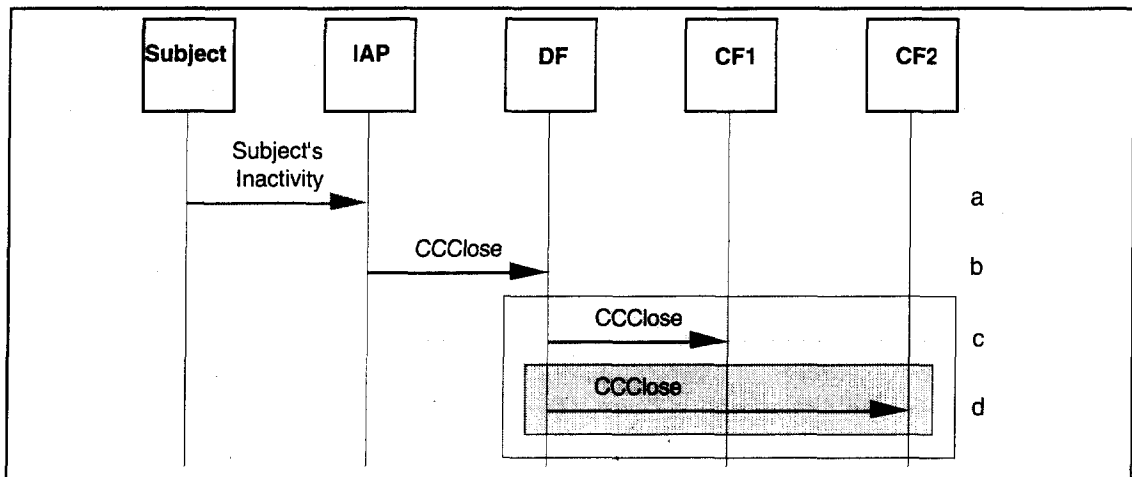


Figure 30: Disassociate CCC Using Dedicated Circuits

B.2.9 Normal CCC Release by the Source.

When a dedicated circuit is released, continuous DTMF C-tone may be applied. The circuit is free for subsequent intercepts of the same intercept subject.

The association of a dedicated circuit to a particular intercept subject and destination is only released when the intercept order is removed or expires as shown in Figure 31.

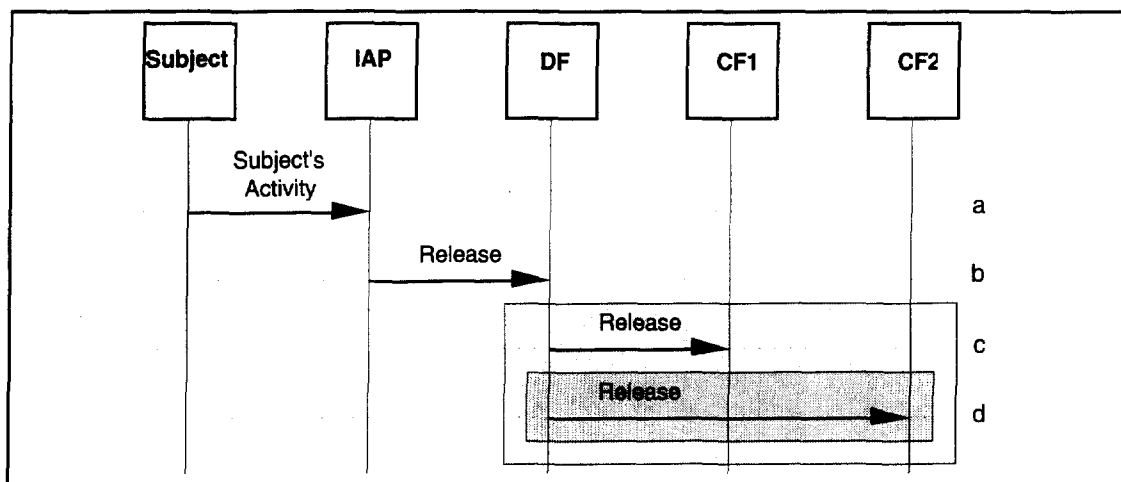


Figure 31: Dedicated Circuit CCC Release

- The IAP is enabled and it detects that the intercept subject has stopped communicating (e.g., the call was released or a party has been dropped).
- The dedicated circuit is released to the Delivery Function. This may be indicated with a DC signaling on-hook (when directly connected), by applying DTMF C-tone, or with the CCClose message.
- If applicable, the Delivery Function releases the dedicated circuit associated with the intercept subject to the Collection Function with a DC signaling on-hook (when directly connected), by applying DTMF C-tone, or with the CCClose message.
- Optionally, the Delivery Function may release the dedicated circuits associated with the intercept subject to one or more additional authorized Collection Functions.

B.3 Trunk Group CCC Delivery

Trunk group delivery uses a set of circuits between two functions to convey call content for a set of subscribers with a common destination as shown in Figure 32. These circuits may be switched on demand through an intervening network at the time of need. A given circuit in a trunk group may be used for any appropriate intercept subject. A line side interface may be part of a trunk group, although that is outside of the classical definition of a trunk group.

Circuits in a trunk group are assumed to have the following characteristics:

- Seize, answer, disconnect and release signals are available using end-to-end (e.g., DC signaling possibly using the DS-0 A signaling bits, ISUP out-of-band signaling, ISDN PRI out-of-band signaling, BRI out-of-band signaling, loop start line signaling). The particular type of signaling used need not be end-to-end as long as it is interworked end-to-end.
- There is a one-to-one correspondence between both ends of a trunk group to identify individual trunks within the trunk group.
- DTMF C-tone may be used, but it is ignored for the purpose of signaling.

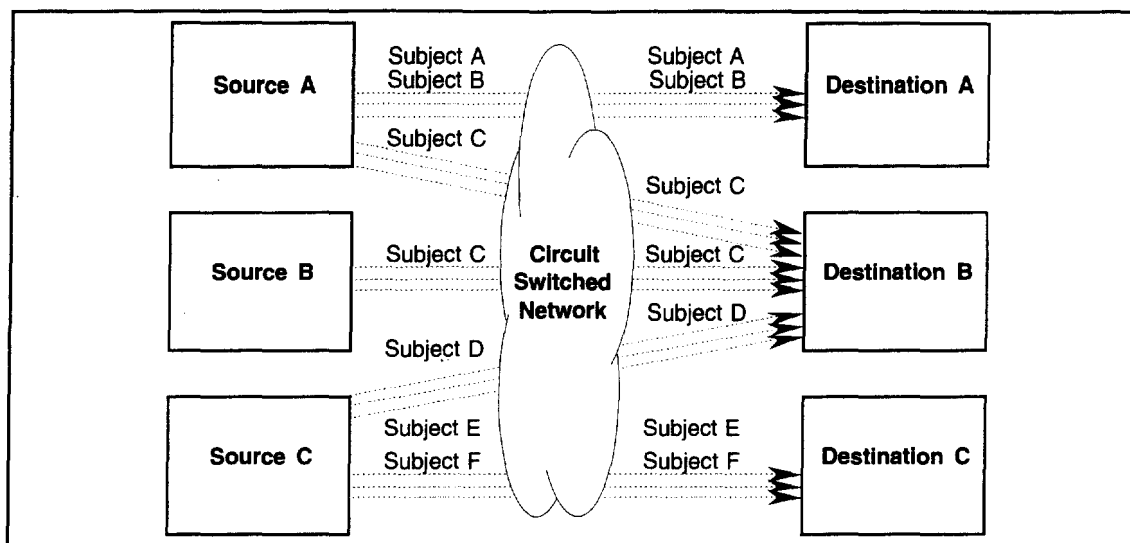


Figure 32: Trunk Group CCC Delivery

- d. A particular trunk circuit is shared by several intercept subjects.
- e. An intercept subject may use one or more trunk circuits for delivering its call content. The maximum number of circuits may be specified for a given intercept subject.
- f. A trunk group goes to only one destination.
- g. The number of trunk circuits to each Collection Function need not be equal.

B.3.1 Obtain Network Address of Destination

Select the trunk group based on the assigned destination. Select an idle trunk within the trunk group for the particular intercept. The selection criteria should use all trunks in the trunk group on a regular basis.

B.3.2 Setup CCC to Destination

Seize the trunk using appropriate trunk signaling (e.g., signal off-hook with the DS-0 A bits, off-hook on a loop start line, send a SETUP message for an ISDN PRI or BRI, send an Initial Address Message for an ISUP trunk) as shown in Figure 33.

- a. The IAP detects that the intercept subject is communicating.
- b. The IAP sends a signal to seize the trunk to the Delivery Function.
- c. If authorized, the Delivery Function sends a signal to seize the trunk to the Collection Function.
- d. Optionally if authorized, the Delivery Function may send a trunk seizure signal to one or more additional Collection Functions.

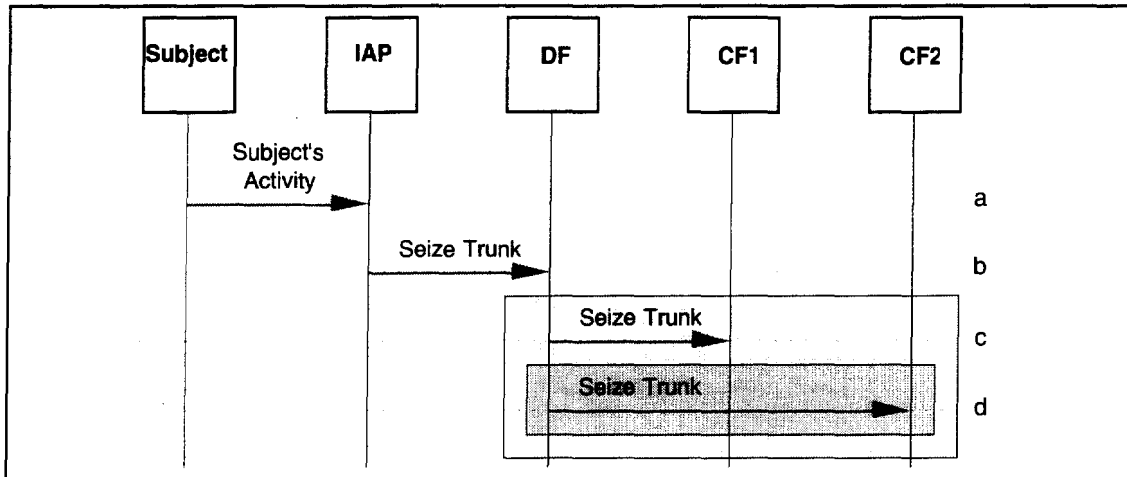


Figure 33: Setup CCCs Using a Trunk from a Trunk Group

B.3.3 Destination Acceptance or Refusal of a CCC

A trunk may be accepted by answering the trunk setup signaling (e.g., return an off-hook with the DS-0 A bits, go off-hook on a loop start line, send a Connect message for an ISDN PRI or BRI, send an Answer Message for an ISUP trunk) as shown in Figure 34.

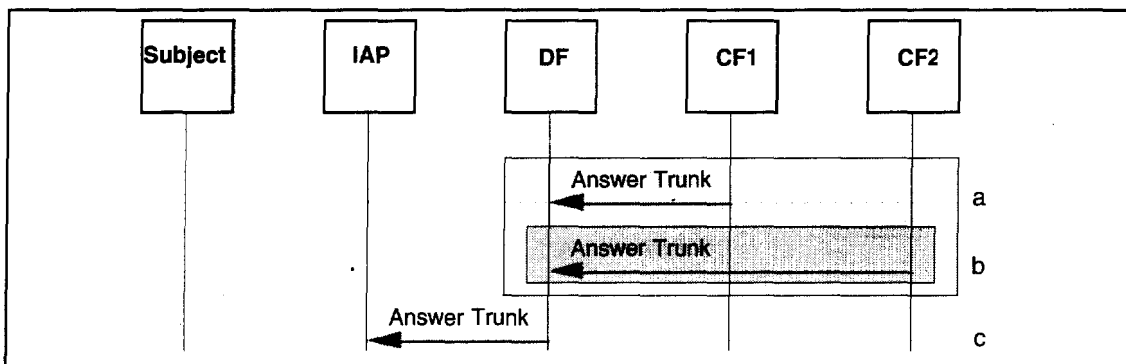


Figure 34: Acceptance of CCCs Using a Trunk of a Trunk Group

- When the trunk is seized at the Collection Function, it may accept the call by returning an answer indication.
- Each additional Collection Function trunk seized may return an answer indication.
- If the call is accepted by the Delivery Function, it may return an answer indication to the IAP.

A trunk may be refused by not answering the seize signal as shown in Figure 35 and Figure 36. If the expected answer signal does not arrive in time, the source assumes that the call was refused and proceeds to release the trunk circuit. A refusal by one Collection Function shall not prevent the delivery of call content to other Collection Functions.

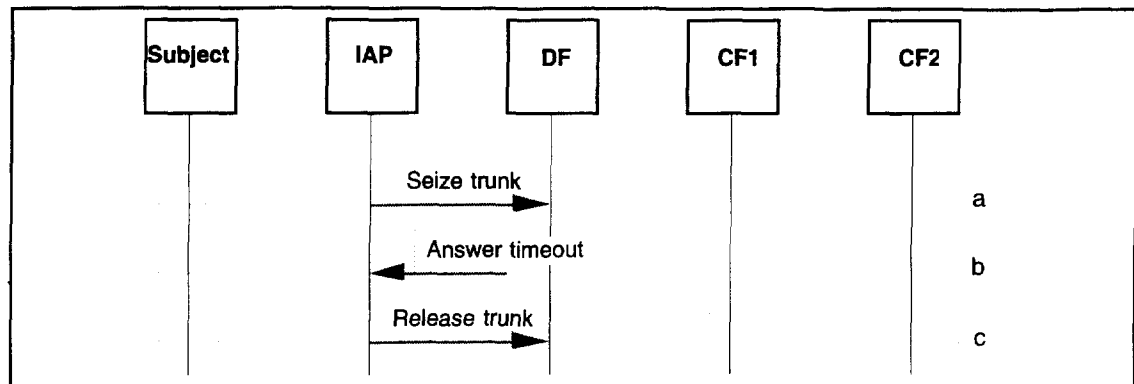


Figure 35: DF Timed Refusal of a CCC Using a Trunk of a Trunk Group

- When a trunk is seized by the IAP, an answer timer is started.
- The answer timer expires, indicating that the call was refused, and...
- ...the IAP releases the trunk toward the Delivery Function.

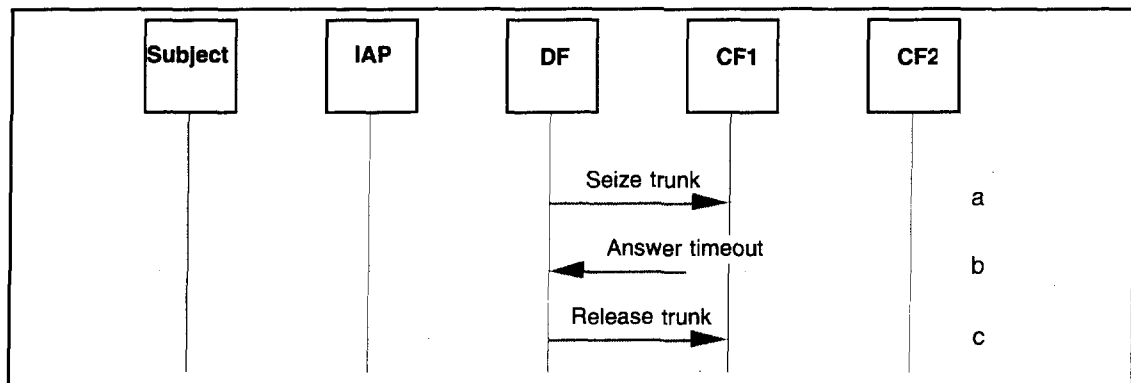


Figure 36: CF Timed Refusal of a CCC Using a Trunk of a Trunk Group

- When a trunk is seized by the Delivery Function, an answer timer is started.
- The answer timer expires, indicating that the call was refused, and...
- ...the Delivery Function releases the trunk toward the Collection Function.

A trunk may be refused by some out-of-band signaling sending a release signal (e.g., ISDN or ISUP) as shown in Figure 37 and Figure 38. A refusal by one Collection Function shall not prevent the delivery of call content to another Collection Function that accepts the call content.

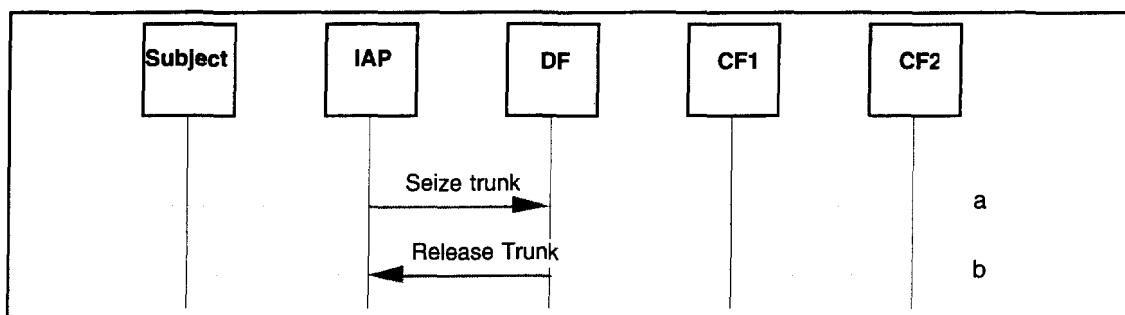


Figure 37: DF Refusal of a CCC Using a Trunk of a Trunk Group

- a. A trunk is seized by the IAP.
- b. The Delivery Function refuses the call by sending a release signal.

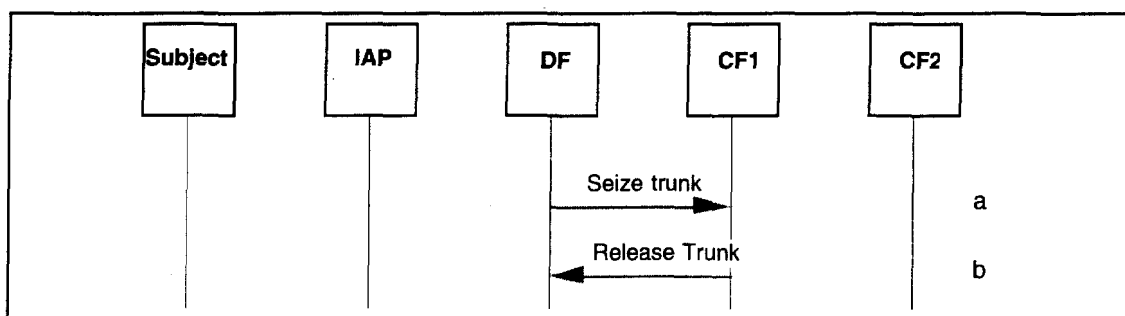


Figure 38: CF Refusal of a CCC Using a Trunk of a Trunk Group

- a. A trunk is seized by the Delivery Function.
- b. The Collection Function refuses the call by sending a release signal.

B.3.4 CCC Continuity Verification

Immediately upon acceptance of the seizure, the destination may loop around the CCC. The source may apply a test signal (or the call content itself) and verify that the signal returned is the same as that sent. This continuity test may have to account for various transmission and switching delays. Since a CCC could be looped around and delayed anywhere, this test does not confirm that the call content was actually delivered to its intended destination. CCC continuity verification is shown in Figure 39.

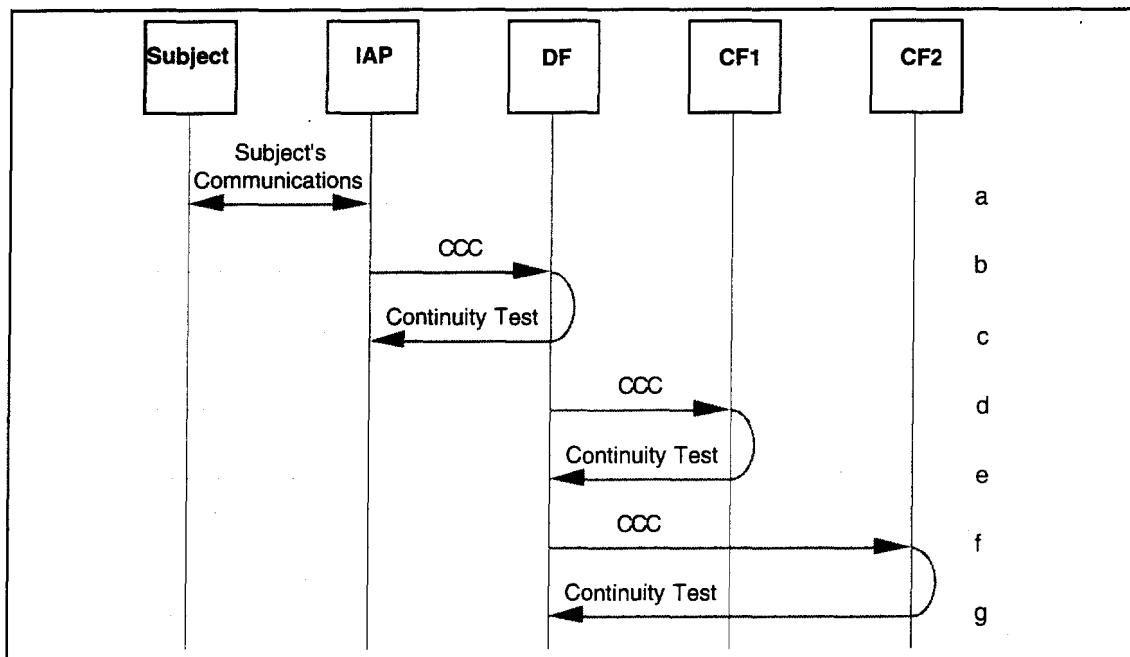


Figure 39: CCC Continuity Test

- c., e. When a CCC is seized; a tone, test pattern, or the call content is applied to the CCC by the source.
- d., f. At the destination of the CCC, the received call content is looped around to the transmit path of the CCC. This loop around should remain in place for the duration of the call content delivery. The destination may detect a preamble tone or test pattern to verify that the CCC is valid from the source. The source shall verify continuity before delivering call content. The source should continuously or periodically verify that the looped around call content is as expected through the duration of call content delivery.

B.3.5 Associate Intercept Subject and Call Identity to the CCC

The CCOpen message associates the intercept subject and a particular call with a particular circuit in a trunk group.

The CCOpen message is communicated in the same manner as dedicated connections (see B.2.5).

B.3.6 Call Content Transfer

The TSP duplicates the intercepted call content and delivers it to the selected Collection Functions over the CCCs identified in the CCOpen message associated with the intercepted communications as shown in Figure 40.

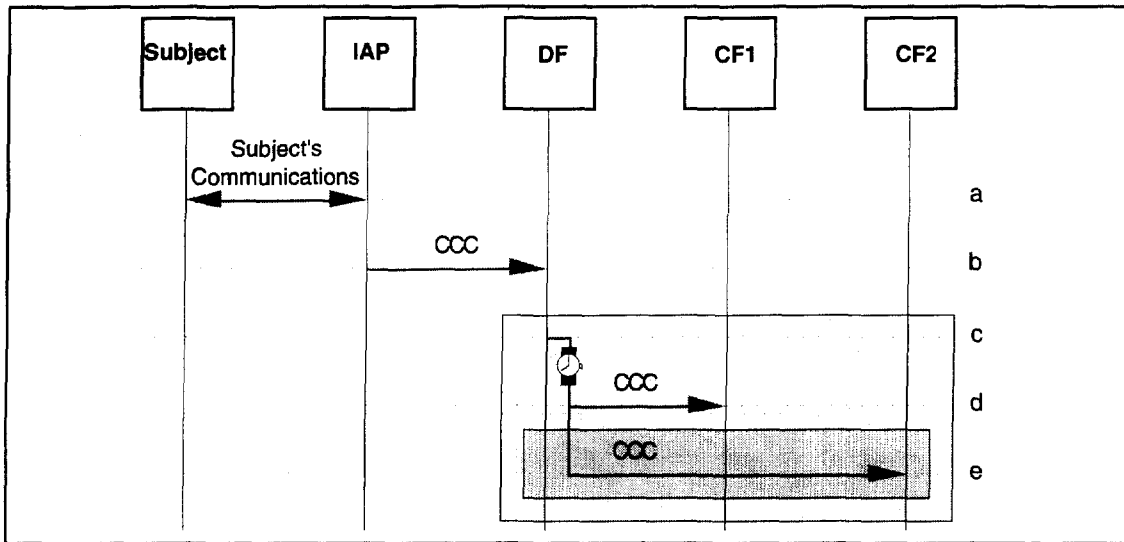


Figure 40: Transfer Delayed Call Content Using a Trunk in a Trunk Group

- The IAP is enabled and it detects that the intercept subject is communicating.
- The intercept subject's communications are intercepted and duplicated, and sent to the Delivery Function.
- If authorized, the Delivery Function passes the call content on to the Collection Function.
- Optionally, the Delivery Function may duplicate the call content and deliver it to one or more additional authorized Collection Functions.

B.3.7 Early CCC Release by the Destination

A trunk in a trunk group may be released early by the destination with the appropriate trunk release signaling (e.g., on-hook indication with the DS-0 A bits, on-hook on a loop start line, a DISCONNECT message for an ISDN PRI or BRI, a Release for an ISUP trunk) as shown in Figure 41. The circuit is free for subsequent intercepts for any intercept subject. Once a CCC is released, the call content delivery may not be re-established.

- The Collection Function determines that the call content is not of interest and it signals to release the trunk.
- Additionally other Collection Functions may indicate that they are not interested in the call content and they independently signal to release the trunk.
- When the Delivery Function determines that the call content is not of interest to any Collection Function, the Delivery Function may send a signal to release the trunk to the IAP.

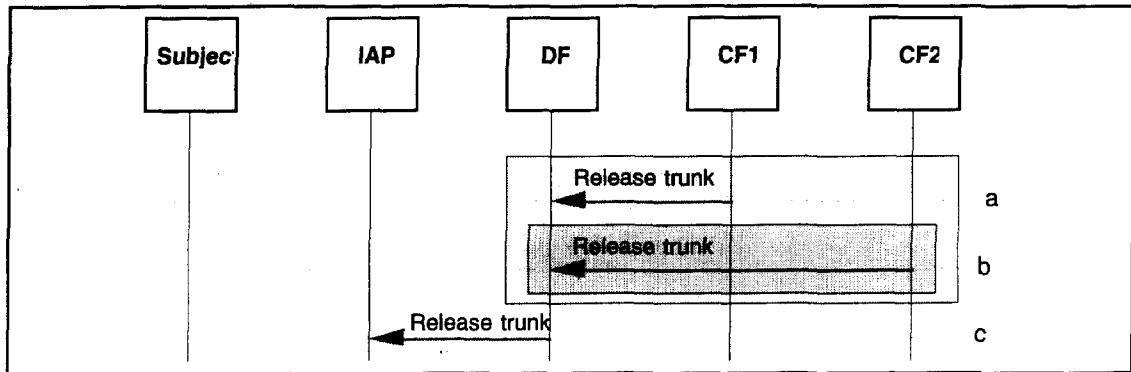


Figure 41: Early Release of CCC Using a Trunk in a Trunk Group

If the destination is not provisioned for early release, the delivery of call content to the destination may be re-established by the source after an unintended early release.

B.3.8 Disassociate CCC

The CCClose message disassociates the intercept subject and a particular call with a particular trunk in a trunk group.

The CCClose message is used in the same manner as dedicated connections (see B.2.8).

B.3.9 Normal CCC Release by the Source

A trunk in a trunk group is normally released by the source with the appropriate trunk release signaling. (e.g., on-hook indication with the DS-0 A bits, on-hook on a loop start line, a DISCONNECT message for an ISDN PRI or BRI, a Release for an ISUP trunk) as shown Figure 42. The circuit is free for subsequent intercepts for any intercept subject.

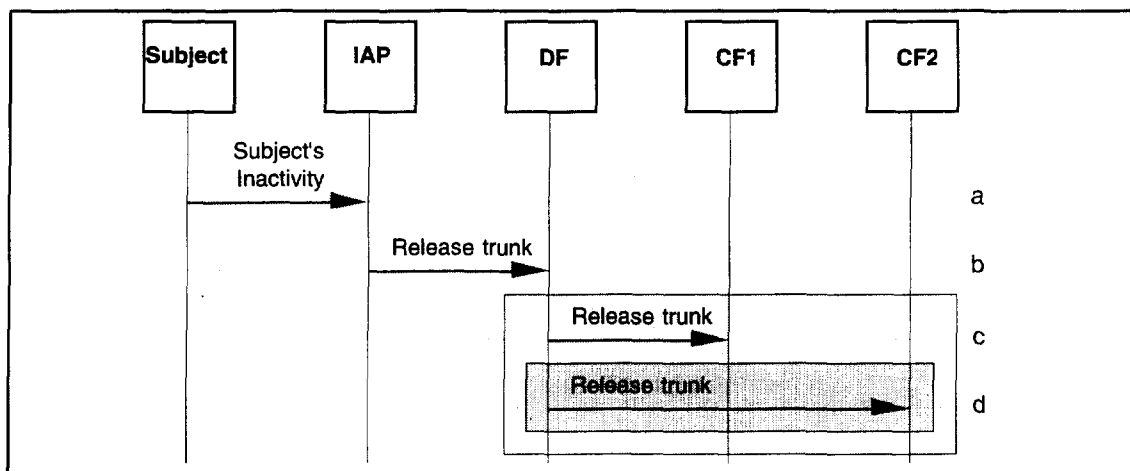


Figure 42: Release CCC Using a Trunk in a Trunk Group

a. The IAP detects that the intercept subject is no longer communicating.

- b. The IAP sends a signal to release the trunk to the Delivery Function.
- c. The Delivery Function sends a signal to release the trunk to the Collection Function.
- d. Optionally if authorized, the Delivery Function may send a trunk release signal for each additional seized trunk to one or more Collection Functions.

B.4 Static Directory Number CCC Delivery

Static directory number delivery uses one or more switched connections to convey the call content for a particular intercept subject as shown Figure 43. Each intercept subject is assigned one or more directory numbers with one number assigned for each CCC that may be delivered. The intercept subject is identified by its association with the directory number. The call content must be separately identified.

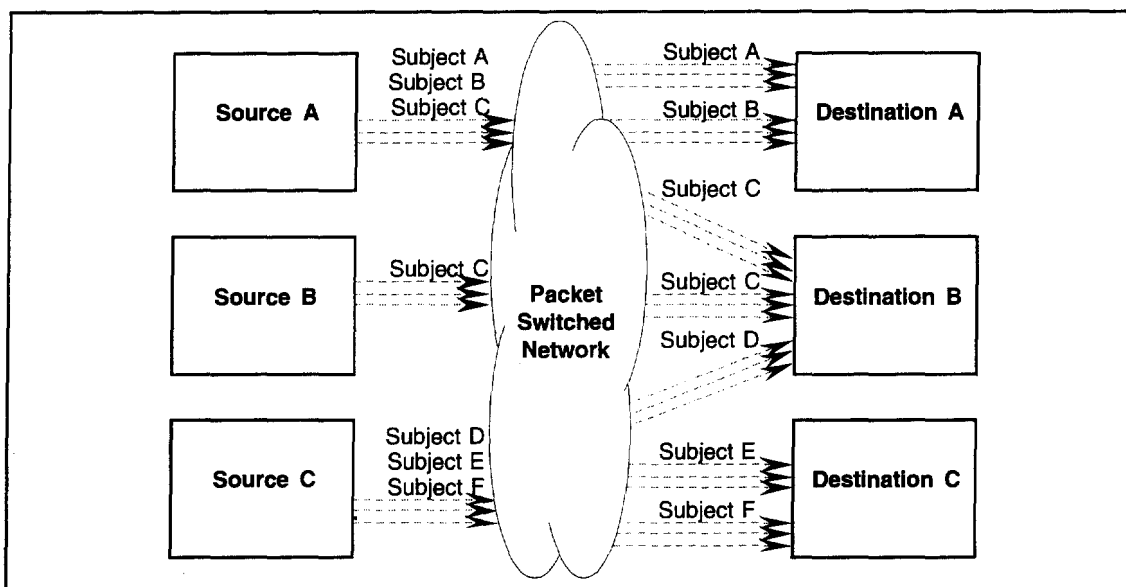


Figure 43: Static Directory Number CCC Delivery

A static directory number uses a circuit from a general set of circuits interfacing a telephone network. These circuits are switched through an intervening network. A given circuit may be used for any appropriate intercept subject. The circuit may be a line or a trunk and the type of circuit may change as the circuit is switched and interworked through the network from the source to the destination.

Only one call may be delivered to a static directory number at a time. No hunt groups may be used. This ensures that the call may be associated by using only the directory number for identification. One directory number must be assigned for the number of calls expected from each enabled IAP or Delivery Function.

Circuits used for static directory numbers are assumed to have the following characteristics:

- a. Seize, setup, answer, disconnect and release signals are available using end-to-end (e.g., DC signaling possibly using the DS-0 A signaling bits and in-band tones, ISUP out-of-band signaling, ISDN PRI out-of-band signaling, BRI out-of-band signaling, loop start line signaling). The particular type of signaling used need not be end-to-end as long as it is interworked end-to-end.
- b. There is a one-to-one correspondence between a static directory number, an intercept subject and the CCC.
- c. DTMF C-tone may be used, but it is ignored for the purpose of signaling.
- d. A particular circuit is not dedicated to a particular intercept subject.
- e. An intercept subject may use one or more circuits for delivering its call content. The maximum number of circuits may be specified for a given intercept subject for each destination.
- f. Capacity for the CCCs may be reserved in each functional entity for each intercept subject.
- g. Capacity for the CCCs may or may not be reserved in the network to reduce network blockage.
- h. The number of circuits to each Collection Function need not be equal.

B.4.1 Obtain Network Address of Destination

Select an idle static directory number based on the intercept subject identity and destination. The selection criteria should use all directory numbers on a regular basis.

B.4.2 Setup CCC to Destination

Seize the trunk and setup the call to the destination as shown Figure 44 using appropriate trunk signaling (e.g., signal off-hook with the DS-0 A bits followed by appropriate MF outpulsing, off-hook on a loop start line followed by appropriate DTMF outpulsing, send a SETUP message with the appropriate called number for an ISDN PRI or BRI, send an Initial Address Message with the appropriate called number for an ISUP trunk).

The CCC for a static directory number is established using normal call setup procedures (e.g., loop start line, ISDN, MF trunk or ISUP trunk).

- a. IAP is enabled to the Delivery Function.
- b. IAP sets up a CCC to Delivery Function.
- c. Delivery Function sets up a CCC to an authorized Collection Function.
- d. Additionally the Delivery Function may setup CCCs to other authorized Collection Functions.

B.4.3 Destination Acceptance or Refusal of a CCC

The CCC is accepted by answering the delivered call. The CCC may be refused by not answering the delivered call within a period of time (mutually